

*What is claimed is:*

1. A gaming machine comprising:

a master gaming controller configured to control one or more games played on  
5 the gaming machine;

a plurality of gaming devices connected to the gaming machine and in  
communication with the master gaming controller wherein at least one of the gaming  
devices generates an event in response to one or more event conditions generated by the  
gaming device; and

10 a memory configured to store a modular tilt handling system that is dynamically  
configurable, the modular tilt handling system comprising a plurality of gaming software  
elements that allow the master gaming controller to detect events and to generate one or  
more tilt conditions in response to the one or more events wherein the modular tilt  
handling system is dynamically configured to generate tilts according to the regulations  
15 of a gaming jurisdiction in which the gaming machine is operating.

2. The gaming machine of claim 1, further comprising sensor monitoring circuitry  
connected to the gaming machine and in communication with the master gaming  
controller wherein the sensor monitoring circuitry generates the event in  
20 response to one or more event conditions detected by the sensor monitoring circuitry.

3. The gaming machine of claim 1, wherein the modular tilt handling system further  
comprises:

a tilt controller, the tilt controller for communicating events generated in the  
25 gaming machine to a tilt manager;

a tilt manager in communication with the tilt controller, the tilt manager  
responsible for declaring, displaying and clearing tilts resulting from the events;

at least one tilt handler loaded by and in communication with the tilt manager, the  
tilt handler configured to generate one or more tilt objects in response to an event; and

30 a tilt presentation loaded by and in communication with the tilt manager, wherein  
the tilt presentation is configured to present tilt related data for display on the gaming  
machine.

4. The gaming machine of claim 3, wherein the tilt controller is located in the gaming system.

5. The gaming machine of claim 3, wherein the tilt controller further comprises a registered event receiver designed to receive events and communicate the events to the tilt manager.

6. The gaming machine of claim 5, wherein the tilt controller further comprises a context designed to receive input events and determine if the tilt context is active.

7. The gaming machine of claim 3, wherein the tilt manager further comprises a tilt handler list and wherein the tilt handler list comprises a list of tilt handlers loaded by the tilt manager.

8. The gaming machine of claim 7, wherein the tilt manager further comprises a tilt list wherein the tilt list comprises a list of tilts generated by the tilt handler that have not cleared.

9. The gaming machine of claim 8, wherein the tilts on the tilt list are prioritized.

10. The gaming machine of claim 8, wherein each of the tilts listed on the tilt list comprises a tilt interface to the tilt object in the tilt handler.

11. The gaming machine of claim 3, wherein the tilt handler is dynamically loaded code.

12. The gaming machine of claim 11, wherein the tilt handler is a shared object.

13. The gaming machine of claim 3, wherein the tilt handler further comprises at least one event handler.

14. The gaming machine of claim 13, wherein the tilt handler further comprises an event handler list of event handlers associated with the tilt handler.

15. The gaming machine of claim 14, wherein the tilt handler further comprises a tilt object generated by an event handler.

16. The gaming machine of claim 15, wherein the tilt object is configured to return to the tilt manager information associated with a single tilt.

17. The gaming machine of claim 15, wherein the tilt object is configured to return to the tilt manager at least one of display data for use when displaying the tilt on the gaming machine, timing data associated with waiting to declare and clear the tilt, the priority of the tilt, the status of the tilt, the type of tilt, whether the tilt is active and combinations thereof.

18. The gaming machine of claim 3, wherein the tilt presentation is dynamically loaded code.

19. The gaming machine of claim 18, wherein the tilt presentation is a shared object.

20. The gaming machine of claim 1, wherein the one or more games is selected from the group consisting of games of chance and games of skill.

21. The gaming machine of claim 1, wherein the one or more games is selected from the group consisting of video slot games, mechanical slot games, video black jack games, video poker games, video keno games, video bingo games, video pachinko games, video card games, video games of chance, video games of skill, and combinations thereof.

22. The gaming machine of claim 1, wherein the gaming device is selected from the group consisting of a bill acceptor, a coin hopper, a printer, a card reader, a display, a coin acceptor, a meter, a player tracking top box, a light bezel, a button panel, a communication device, a power supply monitor, security detection circuitry, a camera, an amplifier, a cash-in device, a cash-out device, an information input device, and a master game controller.

23. The gaming machine of claim 3, wherein the tilt presentation is capable of displaying over an active game screen of the gaming machine such that the active game screen can be viewed through the tilt presentation display.

5

24. A method of generating tilts on a gaming machine, the method comprising:  
loading into RAM one or more game software elements to respond to an event according to requirements of a gaming jurisdiction in which the gaming machine is operating;

10

receiving an event from at least one of a gaming device, a sensor connected to sensor monitoring circuitry and a game software element;  
executing the one or more game software elements in RAM; and  
declaring a tilt.

15

25. The method of claim 24, further comprising:  
clearing the tilt.

20

26. The method of claim 24, further comprising:  
determining the tilt conditions associated with the tilt to a display on the gaming machine.

25

27. The method of claim 24, further comprising:  
receiving an event from at least one of a gaming device, a sensor connected to sensor monitoring circuitry, a game software element;  
comparing the event to one or more tilt conditions; and  
generating a tilt.

30

28. The method of claim 24, further comprising:  
locking-out the gaming machine to game play.

29. A method for declaring a tilt resulting from an event in a gaming machine, the method comprising:  
receiving an event at a tilt controller;

communicating the event from the tilt controller to a tilt manager, the tilt manager further comprising a tilt handler list and a tilt list, the tilt handler list comprising a list of tilt handlers associated with the tilt manager, the tilt list comprising a list of tilts that have not been cleared in the gaming machine;

5           communicating the event from the tilt manager to at least one tilt handler on the tilt handler list;

          communicating the event from the tilt handler to at least one event handler;

          creating a tilt object by the event handler in response to the event that is in accordance with the regulations of a gaming jurisdiction in which the gaming machine is  
10           operating;

          communicating a tilt interface from the tilt handler to the tilt manager, the tilt interface providing a handle back to the tilt object;

          identifying the tilt object on the tilt list; and

          updating a tilt presentation loaded by the tilt manager to include display of  
15           information associated with the tilt.

30.     The method of claim 29, wherein the event is communicated sequentially from the tilt manager to each tilt handler on the tilt handler list until a tilt interface is returned.

20     31.     The method of claim 29, wherein the event is communicated sequentially from the tilt handler to each event handler on the event handler list until a tilt interface is returned.

25     32.     The method of claim 29, further comprising prioritizing the listing of the tilt object on the tilt list according to a prioritization scheme.

33.     The method of claim 29, wherein the event is generated by at least one of a gaming device, sensor monitoring circuitry and a game software element.

30     34.     A method for clearing a tilt declared on a gaming machine, the method comprising:

          receiving an event at a tilt controller;

communicating the event from the tilt controller to a tilt manager, the tilt manager further comprising a tilt handler list and a tilt list, the tilt handler list comprising a list of tilt handlers associated with the tilt manager, the tilt list comprising a list of tilts that identifies tilt objects that have not been cleared in the gaming machine;

5        communicating the event from the tilt manager to each of the tilt objects identified on the tilt list;

      updating the state of each tilt object based upon the event and in accordance with the regulations of a gaming jurisdiction;

10       querying the tilt object by the tilt manager to determine if the tilt object is cleared;

      communicating that the tilt object is cleared in response to a query from the tilt manager;

      removing the cleared tilt object from the tilt list; and

15       updating a tilt presentation loaded by the tilt manager to include updated display of information associated with any remaining tilts.

35.     The method of claim 34, wherein the event is communicated to each tilt object identified on the tilt list.

20     36.     The method of claim 34, wherein the tilt list is reprioritized prior to updating the tilt presentation so that data associated with the highest priority tilts is displayed.

25     37.     The method of claim 34, wherein prior to returning a cleared status, the tilt objects are queried after receipt of each received event, and the tilt presentation display data is updated.

38.     The method of claim 34, wherein the event is generated by at least one of a gaming device, sensor monitoring circuitry and a game software element.

30     39.     A gaming machine network comprising:  
      a plurality of file storage devices storing gaming software programs;  
      a plurality of gaming machines, each gaming machine comprising:

a gaming system configured to control one or more games played on the gaming machine;

a plurality of gaming devices connected to the gaming machine and in communication with the gaming system wherein at least one of the gaming devices generates an event in response to one or more event conditions generated by the gaming device;

a memory configured to store a modular tilt handling system that is dynamically configurable, the modular tilt handling system comprising a plurality of gaming software elements that allow the master gaming controller to detect events and to generate one or more tilt conditions in response to the one or more events in accordance with the regulations of a gaming jurisdiction,

wherein the modular tilt handling system further comprises:

a tilt controller, the tilt controller for communicating events generated in the gaming machine to a tilt manager;

a tilt manager in communication with the tilt controller, the tilt manager responsible for declaring, displaying and clearing tilts resulting from the events;

at least one tilt handler loaded by and in communication with the tilt manager, the tilt handler configured to generate one or more tilt objects in response to an event, wherein each tilt object represents a tilt; and

a tilt presentation loaded by and in communication with the tilt manager, wherein the tilt presentation is configured to present tilt related data for display on the gaming machine; and

a network allowing communication between the file storage devices and the plurality of gaming machines.

40. The gaming machine network of claim 39, further comprising:

sensor monitoring circuitry connected to the gaming machine and in communication with the gaming system wherein the sensor monitoring circuitry generates the event in response to one or more event conditions detected by the sensor monitoring circuitry.

41. The gaming machine network of claim 39, wherein the network is the Internet.

42. The gaming machine network of claim 39, wherein the network is an intranet.

5 43. The gaming machine network of claim 39, wherein the tilt controller is located in the gaming system.

44. The gaming machine network of claim 39, wherein the tilt controller further comprises a registered event receiver.

10

45. The gaming machine network of claim 44, wherein the tilt controller further comprises a context.

15

46. The gaming machine network of claim 39, wherein the tilt manager further comprises a tilt handler list wherein the tilt handler list comprises a list of tilt handlers associated with the tilt manager.

20

47. The gaming machine network of claim 46, wherein the tilt manager further comprises a tilt list wherein the tilt list comprises a list of tilts generated by the tilt handler that have not cleared.

48. The gaming machine network of claim 47, wherein the tilts on the tilt list are prioritized.

25

49. The gaming machine network of claim 48, wherein each of the tilts listed on the tilt list comprise a tilt interface to the tilt object in the tilt handler.

50. The gaming machine network of claim 39, wherein the tilt handler is dynamically loaded code.

30

51. The gaming machine network of claim 39, wherein the tilt handler is a shared object.



52. The gaming machine network of claim 39, wherein the tilt handler further comprises at least one event handler.

53. The gaming machine network of claim 52, wherein the tilt handler further comprises an event handler list of event handlers associated with the tilt handler.

54. The gaming machine network of claim 52, wherein the tilt handler further comprises a tilt object generated by an event handler.

55. The gaming machine network of claim 54, wherein the tilt object is configured to return to the tilt manager information associated with a single tilt.

56. The gaming machine network of claim 54, wherein the tilt object is configured to return to the tilt manager at least one of display data for use when displaying the tilt on the gaming machine, timing data associated with waiting to declare and clear the tilt, the priority of the tilt, the status of the tilt, the type of tilt, and whether the tilt is active.

57. The gaming machine network of claim 39, wherein the tilt presentation is dynamically loaded code.

58. The gaming machine network of claim 39, wherein the tilt presentation is a shared object.

59. The gaming machine network of claim 39, wherein the tilt presentation is capable of displaying over an active game screen of the gaming machine such that the active game screen can be viewed through the tilt presentation display.

60. A computer readable medium containing executable computer program instructions which when executed by a digital processing system cause the system to perform a method for declaring a tilt resulting from an event in a gaming machine, the method comprising:

receiving an event at a tilt controller;

communicating the event from the tilt controller to a tilt manager, the tilt manager further comprising a tilt handler list and a tilt list, the tilt handler list comprising a list of tilt handlers associated with the tilt manager, the tilt list comprising a list of tilts that have not been cleared in the gaming machine;

5           communicating the event from the tilt manager to at least one tilt handler on the tilt handler list;

          communicating the event from the tilt handler to at least one event handler;

          creating a tilt object by the event handler in response to the event that is in accordance with the regulations of a gaming jurisdiction;

10          communicating a tilt interface from the tilt handler to the tilt manager, the tilt interface providing a handle back to the tilt object;

          identifying the tilt object on the tilt list; and

          updating a tilt presentation loaded by the tilt manager to include display of information associated with the tilt.

15           61.     The computer readable medium of claim 60, wherein the event is communicated sequentially from the tilt manager to each tilt handler on the tilt handler list until a tilt interface is returned.

20           62.     The computer readable medium of claim 60, wherein the event is communicated sequentially from the tilt handler to each event handler on the event handler list until a tilt interface is returned.

25           63.     The computer readable medium of claim 60, further comprising prioritizing the tilt object on the tilt list according to a prioritization scheme.

          64.     A computer readable medium containing executable computer program instructions which when executed by a digital processing system cause the system to perform a method for generating tilts on a gaming machine, the method comprising:

30           loading into RAM one or more game software elements to respond to an event according to requirements of a gaming jurisdiction in which the gaming machine is operating;

receiving an event from at least one of a gaming device, a sensor connected to sensor monitoring circuitry and a game software element;  
executing the one or more game software elements in RAM; and  
declaring a tilt.

5

65. The computer readable medium of claim 64, wherein the method further comprises:  
clearing the tilt.

10

66. The computer readable medium of claim 64, wherein the method further comprises:  
determining the tilt conditions to a display on the gaming machine.

15

67. The computer readable medium of claim 64, wherein the method further comprises:  
receiving an event from at least one of a gaming device, a sensor connected to sensor monitoring circuitry, a game software element;  
comparing the event to one or more tilt conditions; and  
generating the tilt.

20

68. The computer readable medium of claim 64, wherein in the method further comprises:  
locking-out the gaming machine to game play.

25

69. A computer readable medium containing executable computer program instructions which when executed by a digital processing system cause the system to perform a method for clearing a tilt declared on a gaming machine, the method comprising:

30

receiving an event at a tilt controller;  
communicating the event from the tilt controller to a tilt manager, the tilt manager further comprising a tilt handler list and a tilt list, the tilt handler list comprising a list of tilt handlers associated with the tilt manager, the tilt list comprising a list of tilts that identifies tilt objects that have not been cleared in the gaming machine;

communicating the event from the tilt manager to each of the tilt objects  
identified as tilts on the tilt list;

updating the state of each tilt object based upon the event and in accordance with  
the regulations of a gaming jurisdiction;

5        querying the tilt object by the tilt manager to determine if the tilt object is  
cleared;

communicating that the tilt object is cleared in response to a query from the tilt  
manager;

removing the cleared tilt object from the tilt list; and

10        updating a tilt presentation loaded by the tilt manager to include an updated  
display of information associated with any remaining tilts.

70.     The computer readable medium of claim 69, wherein the event is communicated  
to each tilt identified on the tilt list.

15        71.     The computer readable medium of claim 69, wherein the tilt list is reprioritized  
prior to updating the tilt presentation so that data associated with the highest priority tilt  
is displayed.

20        72.     The computer readable medium of claim 69, wherein prior to returning a cleared  
status, the tilt objects are queried after receipt of each received event, and the tilt  
presentation display data is updated.

25        73.     A device for generating tilts in a gaming machine, the device comprising:

a first logic for detecting an event has occurred in a gaming machine and for  
communicating the event to a second logic; and

a second logic for determining if the event constitutes a tilt and for generating a  
tilt if the event constitutes a tilt.

30        74.     The device of claim 73, wherein the second logic generates a tilt presentation  
including tilt related data for display on the gaming machine.